CLAIMS

1. A Real Time Protocol (RTP) packet handler, comprising:

a protocol processor coupled to a communications medium and receiving IP packets transmitted over the communications medium;

a central processing unit connected to the protocol processor and having operating system (OS) software executing thereon and controlling the operation thereof;

means for examining the received IP packets and headers of the received IP packets to detect RTP packets; and

an RTP packet handler module executing on the protocol processor, wherein detected RTP packets are passed to the RTP packet handler module for processing and non-RTP packets are processed by the OS software.

2. The RTP packet handler of claim 1, wherein the communications medium comprises an Ethernet.

3. The RTP packet handler of claim 1, wherein the means for examining the received IP packets and detecting RTP packets comprises a lookup table for storing RTP packet headers.

4. The RTP packet handler of claim 3, wherein the RTP packet handler module comprises a microcode routine.

5. A Real Time Protocol (RTP) packet handler, comprising:

a protocol processor coupled to a communications medium and receiving IP packets transmitted over the communications medium;

a central processor having operating system (OS) software executing thereon and controlling the operation thereof;

a lookup table for storing predetermined IP packet headers;

a comparator for comparing a current IP packet header with the IP packet headers stored in the lookup table, wherein when the current IP packet header matches one of the IP packet headers stored in the lookup table, a RTP packet is detected; and

an RTP packet handler module executing on the protocol processor for processing RTP packets, wherein detected RTP packets are passed to the RTP packet handler module for processing and non-RTP packets are processed by the OS software.

6. The RTP packet handler of claim 5, wherein the RTP packet handler module comprises a microcode routine.

7. In a processor, a method of processing RTP packets, comprising the steps of:

receiving an internet protocol (IP) packet via a communication medium;

detecting an RTP packet by examining a header of the IP packet;

redirecting the IP packet to an RTP handler module based on the detecting step results when the IP packet is a RTP packet; and

processing the redirected RTP packet with the RTP handler module, wherein the RTP handler module operates on a protocol processor and an operating system operates on the processor.

8. The method of claim 7, further comprising the step of directing the IP packet to an operating system packet handling routine when the packet is not an RTP packet.

9. The method of claim 7, wherein the detecting step examines the IP packet by comparing the packet header with header values prestored in a lookup table.

10. The method of claim 7, further comprising the step of copying a detected RTP packet to a backup buffer.

11. The method of claim 7, wherein the processing step includes sorting multiple detected RTP packets according to their packet sequence numbers.

12. The method of claim 11, wherein the processing step further comprises dispatching the sorted RTP packets to a software upper layer.

13. The method of claim 12, further comprising the step of the RTP handler module building RTP packets and transmitting the built RTP packets over the communication medium.